Docket No.: SUT-0225
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Masami Maekawa

Application No.: 10/653,193 Confirmation No.: 1753

Filed: September 03, 2003 Art Unit: 3626

For: EXAMINATION SCHEDULING PROGRAM FOR NUCLEAR MEDICAL EXAMINATION APPARATUS Examiner: Rachel L. Porter

APPEAL BRIEF

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

As required under 37 C.F.R. §41.66(a), this brief is filed within the statutory term of the Notice of Appeal filed in this case on May 26, 2009, and is in furtherance of said Notice of Appeal.

The fees required under 37 C.F.R. §41.20(b)(2), and any required petition for extension of time for filing this brief and fees therefor, are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF.

This brief contains items under the following headings as required by 37 C.F.R. §41.67 and §1205.02 of the MPEP:

I. Real Party in Interest
II Related Appeals and Interferences
III. Status of Claims
IV. Status of Amendments After Final

I. REAL PARTY IN INTEREST

The real party in interest for this appeal is Shimadzu Corporation of Kyoto, Japan. An assignment of all rights in the present application to Shimadzu Corporation has been submitted and recorded by the U.S. Patent and Trademark Office at Reel 014453, Frame 0833.

II. RELATED APPEALS AND INTERFERENCES

There are no other prior and pending appeals which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III. STATUS OF CLAIMS

A. Total Number of Claims in Application

There are 21 total claims in this application.

B. Current Status of Claims

1. Claims canceled: None

2. Claims withdrawn from consideration but not canceled: Claim 21

3. Claims pending: Claim 1-21

4. Claims allowed: None

5. Claims rejected: Claims 1-20

C. Claims on Appeal

The claims on appeal are claims 1-20.

IV. STATUS OF AMENDMENTS AFTER FINAL

Applicant filed an Amendment in response to the first Office Action (mailed April 2, 2008) on August 4, 2008, following the filing of the application on September 3, 2003. The Examiner responded to the Amendment with a Final Office Action mailed November 26, 2008. Applicant filed a Response to the Final Office Action on March 26, 2009, and the Examiner responded in an Advisory Action mailed April 28, 2009, which is the subject of this Appeal since the claims of the present application have been at least twice rejected by the Examiner.

Accordingly, the claims enclosed herein in Appendix A are directed to claims 1-20 which were presented in Applicant's response filed March 26, 2009.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Claim 1 is directed to an examination scheduling program for a single nuclear medical examination apparatus having computer executable instructions stored in computer memory for causing a computer to create a schedule for each patient including an examination by the nuclear medical examination apparatus and a medication accompanying the examination (see page 4, lines 15-19, of the present specification). The program causes the computer to perform (1) a function for fetching information on contents of the examination and an order of examination for each patient (see page 4, lines 20-21, of the present specification), (2) a function for fetching a waiting time from the medication to the examination set according to a type of examination; and (3) a function for creating an examination schedule to avoid overlapping in time between timing of the medication and the examination for each patient and timing of medication and examination for other patients,

based on said information on contents of the examination and an order of examination and the waiting time (see page 4, line 22, to page 5, line 17, of the present specification). (Please also see page 10, line 23, to page 11, line 11, of the specification or see paragraph [0044] of the present patent application publication 2004-0093252).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Whether claims 1-20 can be rejected under 35 U.S.C. §103(a) as being unpatentable over Kameda et al. (U.S. Patent No. 5,923,018) in view of Strum et al. (U.S. Patent No. 5,842,173).

VII. ARGUMENT

In the Office Action of November 26, 2008, the following rejection was presented by the Examiner:

(i) 35 U.S.C. §112, first paragraph

None

(ii) 35 U.S.C. §112, second paragraph

None

(iii) 35 U.S.C. §102

None

(iv) 35 U.S.C. §103

1. The Examiner rejected claims 1-20 under 35 U.S.C. §103(a) as being unpatentable over Kameda et al. (U.S. Patent No. 5,923,018) in view of Strum et al. (U.S. Patent No. 5,842,173).

To establish a *prima facie* case of obviousness, the cited references, in combination, must teach or suggest the invention as a whole, including all the limitations of the claims. Here, in this case, Kameda et al., in combination with Strum et al., fails to teach or suggest all of the limitations of the claims with particular emphasis on the limitations "*said program causing said computer to perform: a function for fetching information on contents of the examination and an order of examination for each patient*", "*a function for fetching a waiting time from the medication to the examination set according to a type of examination*" and "*a function for creating an examination schedule to avoid overlapping in time between timing of the medication and the examination for each patient and timing of medication and examination for other patients, based on said information on contents of the examination and an order of examination and the waiting time*".

As described in Applicant's responses filed August 4, 2008 and March 26, 2009, the present invention is directed to scheduling for a nuclear medical examination apparatus from medication to examination. The present invention avoids overlapping in time between timing of medication and examination for each patient and timing of medication and examination for other patients, based on information fetched. In the present invention, **it is the program itself which causes a computer to create and adjust the examination schedule** for the nuclear medical examination apparatus **to avoid overlap in time of timing of the medication and the examinations** for each patient according to said fetching information (on said contents of the examination and said order of examinations), while maintaining fixed a waiting time from the medication to the examination set for each patient according to a type of examination (see paragraphs [0056], [0059], and [0069]-[0072] of the present patent application publication). In other words, based on the fetching information and changes in said information (see claims 17-20), the claimed computer program causes the computer to compute the examination schedule and adjustments thereto to maximize efficient use of the nuclear medical examination apparatus and to

prevent errors in examination (see Description of the Related Art section of the present specification)

In contrast, the program of Kameda et al. is only a centralize database program containing patient medical information and examination and treatment schedules which are inputted, added, changed, modified or deleted by the operators of the database program (see column 4, lines 1-7, 13-18, 29-34 and 49-56, of Kameda et al.). Kameda et al. merely discloses a program assisting an operator to create a treatment schedule for each patient by carrying out inputs, changes, deletions, etc. directly from the operator while the operator looks at a displayed table. In other words, the database program of Kameda et al. only stores, organizes and displays the information and schedules inputted by operators and does not create thru computation the examination schedule to avoid overlap in time of timing of the medication and the examinations according to said fetching information while maintaining fixed a waiting time from the medication to the examination set for each patient according to a type of examination. As stated in the title of the patent and the preamble of the claims, Kameda et al. only disclose a "*medical care schedule and record aiding system*". Hence, Applicant believes that the present invention and Kameda et al. are completely different in technical premise and that the features of the present invention are not at all disclosed in Kameda et al.

Based on the Examiner's comments in the Office Action dated November 26, 2008 (see item 7(B) of the Office Action), it appears that the Examiner was not persuaded by Applicant's arguments because the Examiner believes that the current claim language does not preclude the involvement of the operator for examination schedule creation. In other words, the Examiner appears to be interpreting the limitation "*said program causing said computer to perform . . . a function for creating an examination schedule*" as allowing an operator to perform some steps of the function as long as some other steps such as the data retrieval and scheduling display are performed by a computer. However, Applicant believes that the Examiner interpretation is incorrect in this regard.

It is expressly stated in the claims that the **program (and not the operator)** causes to computer to perform functions of (1) "*fetching information on contents of the examination and an order of examination for each patient*", (2) "*fetching a waiting time from the medication to the*

examination set according to a type of examination" and (3) "*creating an examination schedule to avoid overlapping in time between timing of the medication and the examination for each patient and timing of medication and examination for other patients, based on said information on contents of the examination and an order of examination and the waiting time*". In other words, from the examination information and medication wait times of each patient, the program of the present invention expressly requires the computer to create an examination schedule to avoid overlapping in time between timing of the medication and the examination for each patient and timing of medication and examination for other patients. In Kameda et al., the operator, by carrying out inputs, changes, deletions, etc. while looking at a table displayed by the program, does not cause the computer to create an examination schedule to avoid overlapping in time between timing of the medication and the examination for each patient and timing of medication and examination for other patients. These functions are performed by the operator of the program in Kameda et al. and not by the computer since the program of Kameda et al. has no function of comparing the examination information and medication wait times of each patient to avoid overlaps.

The Examiner has attempted to cure this deficiency in Kameda et al. by citing the teachings of Strum et al. (see column 14, lines 10-28, of Strum et al.). However, contrary to the Examiner's arguments, Applicant believes that the limitation "*a function for creating an examination schedule to avoid overlapping in time between timing of the medication and the examination for each patient and timing of medication and examination for other patients, based on said information on contents of the examination and an order of examination and the waiting time*" is not taught or suggested by Strum et al.

Strum et al., in column 14, lines 10-28, only describes reviewing of throughput of medical equipment by referring to the real-time throughput tracking Gantt chart displaying a schedule for using the medical equipment, and a track record of the medical facilities being used. Strum et al. avoids overlapping in time of patients for certain medical equipment in order to improve throughput of medical equipment in medical facilities. However, no consideration is made for avoiding the overlapping in time between timing of medication and examination for each patient and timing of medication and examination for other patients as claimed in the present invention.

In other words, Strum et al. merely creates a schedule for use of medical equipment by each patient, as a way to avoid overlapping of use of the medical equipment for examination medication and the like. In contrast, the present invention avoids overlapping of medication timing and examination among patients. With the present invention, a schedule can be created such that, during a waiting time between medication timing and examination of a certain patient, other patients are medicated or examined. According to Strum et al., medical equipment is deemed occupied and being used even during a period including a waiting time between medication timing and examination, and therefore other patients cannot be medicated or examined. That is, Strum et al. does not disclose or suggest the technical feature of the present invention, i.e. the "*function for creating an examination schedule to avoid overlapping in time between timing of the medication and the examination for each patient and timing of medication and examination for other patients, based on said information on contents of the examination and an order of examination and the waiting time*". Hence, Strum et al. does not cure the deficiency of Kameda et al.

It should also be noted that Strum et al. only teaches the creation of an examination schedule by bar code or direct keyboard entry as patients are moved from location to location within the hospital. The computer program is only used to analyze the time spent at each hospital location by a statistical description of the distribution of waiting periods and duration of procedures. By examining the statistical trends and outliers, problem areas relating to the servicing of the patient at the hospital can be identified and improvements can be made (see Figures 3 and 10, and column 14, lines 10-28, of Strum et al.). Hence, Strum et al. clearly does not at all teach or suggest the creation and adjustment of the examination schedule thru a computer function since the examination schedule is only created by an operator via scanning of a bar code or keyboard entry. Further, Strum et al. also clearly does not teach or suggest a computer function for creating the examination schedule to avoid overlapping in time between timing of the medication and the examination for each patient and timing of medication and examination for other patients since the computer program of Strum et al. does not compared the timing of medication and examination for other patients in creating the examination schedule.

Thus, for the reasons set forth above, the present invention cannot be deemed to be obvious from the teachings and suggestions of Kameda et al. and Strum et al. Hence, withdrawal of the outstanding rejection is respectfully requested.

(v) Other

None

VIII. CLAIMS APPENDIX

A copy of the claims involved in the present appeal is attached hereto as Appendix A.

IX. EVIDENCE APPENDIX

No evidence pursuant to §§1.130, 1.131, or 1.132 or entered by or relied upon by the Examiner is being submitted.

X. RELATED PROCEEDINGS APPENDIX

No related proceedings are referenced in II. above. Thus, no copies of decisions in related proceedings are provided.

CONCLUSION

Applicant believes that no additional fee is due with this brief. However, if a fee is due, please charge our Deposit Account No. 50-4422, under Order No. SUT-0225 from which the undersigned is authorized to draw.

Dated: July 27, 2009

Respectfully submitted,

By: _____

Lee Cheng
Registration No.: 40,949
CHENG LAW GROUP PLLC
1100 17th Street, N.W.
Suite 503
Washington, DC 20036
(202) 530-1280
Attorneys for Applicant

APPENDIX A

Claims Involved in the Appeal of Application Serial No. 10/653,193.

1. (Previously Presented) An examination scheduling program for a single nuclear medical examination apparatus having computer executable instructions stored in computer memory for causing a computer to create a schedule for each patient including an examination by the nuclear medical examination apparatus and a medication accompanying the examination, said program causing said computer to perform:

a function for fetching information on contents of the examination and an order of examination for each patient;

a function for fetching a waiting time from the medication to the examination set according to a type of examination; and

a function for creating an examination schedule to avoid overlapping in time between timing of the medication and the examination for each patient and timing of medication and examination for other patients, based on said information on contents of the examination and an order of examination and the waiting time.

2. (Original) An examination scheduling program as defined in claim 1, wherein said schedule for each patient is expressed by a pattern having a time span according to the type of examination, said pattern presenting the timing of the medication, the waiting time and the contents of the examination.

3. (Original) An examination scheduling program as defined in claim 1, wherein said schedule for each patient is displayed in form of a pattern on a time chart, with a line representing present time displayed to move on the time chart with progress of time.

4. (Original) An examination scheduling program as defined in claim 2, wherein said schedule for each patient is displayed in form of a pattern on a time chart, with a line representing

present time displayed to move on the time chart with progress of time.

5. (Original) An examination scheduling program as defined in claim 1, wherein said schedule is altered by moving said pattern on said time chart with a pointing device.

6. (Original) An examination scheduling program as defined in claim 2, wherein said schedule is altered by moving said pattern on said time chart with a pointing device.

7. (Original) An examination scheduling program as defined in claim 3, wherein said schedule is altered by moving said pattern on said time chart with a pointing device.

8. (Original) An examination scheduling program as defined in claim 4, wherein said schedule is altered by moving said pattern on said time chart with a pointing device.

9. (Original) An examination scheduling program as defined in claim 1, wherein said schedule for each patient is under control, and a correlation is made between actual measurements including actual medication and examination times, and data collected by said nuclear medical examination apparatus.

10. (Original) An examination scheduling program as defined in claim 2, wherein said schedule for each patient is under control, and a correlation is made between actual measurements including actual medication and examination times, and data collected by said nuclear medical examination apparatus.

11. (Original) An examination scheduling program as defined in claim 3, wherein said schedule for each patient is under control, and a correlation is made between actual measurements including actual medication and examination times, and data collected by said nuclear medical examination apparatus.

12. (Original) An examination scheduling program as defined in claim 4, wherein said schedule for each patient is under control, and a correlation is made between actual measurements including actual medication and examination times, and data collected by said nuclear medical examination apparatus.

13. (Original) An examination scheduling program as defined in claim 5, wherein said schedule for each patient is under control, and a correlation is made between actual measurements including actual medication and examination times, and data collected by said nuclear medical examination apparatus.

14. (Original) An examination scheduling program as defined in claim 6, wherein said schedule for each patient is under control, and a correlation is made between actual measurements including actual medication and examination times, and data collected by said nuclear medical examination apparatus.

15. (Original) An examination scheduling program as defined in claim 7, wherein said schedule for each patient is under control, and a correlation is made between actual measurements including actual medication and examination times, and data collected by said nuclear medical examination apparatus.

16. (Original) An examination scheduling program as defined in claim 8, wherein said schedule for each patient is under control, and a correlation is made between actual measurements including actual medication and examination times, and data collected by said nuclear medical examination apparatus.

17. (Original) An examination scheduling program as defined in claim 1, further comprising a step of inputting an actual medication time, a step of comparing a scheduled medication time and said actual medication time, and a step of creating an examination schedule all over again when said step of comparing shows a disagreement.

18. (Original) An examination scheduling program as defined in claim 2, further comprising a step of inputting an actual medication time, a step of comparing a scheduled medication time and said actual medication time, and a step of creating an examination schedule all over again when said step of comparing shows a disagreement.

19. (Original) An examination scheduling program as defined in claim 3, further comprising a step of inputting an actual medication time, a step of comparing a scheduled medication time and said actual medication time, and a step of creating an examination schedule all over again when said step of comparing shows a disagreement.

20. (Original) An examination scheduling program as defined in claim 5, further comprising a step of inputting an actual medication time, a step of comparing a scheduled medication time and said actual medication time, and a step of creating an examination schedule all over again when said step of comparing shows a disagreement.